

What is claimed is:

1. A method for passing an on-screen display over a serial interface, comprising:
 - detecting at a source device an action requiring an on-screen display at a sink device;
 - encoding the on-screen display at the source device as an isochronous MPEG data stream; and
 - passing said isochronous MPEG data stream carrying said on-screen display to said sink device via said serial interface.
2. A method in accordance with claim 1, wherein:
 - said serial interface comprises an IEEE-1394 interface.
3. A method in accordance with claim 1, further comprising:
 - providing said isochronous MPEG data stream carrying said on-screen display with an associated program identifier (PID);
 - multiplexing the isochronous MPEG data stream carrying said on-screen display and said associated PID with an active isochronous MPEG data stream to provide a multiplexed transport stream; and
 - wherein said isochronous data stream carrying said on-screen display is passed to said sink device in said multiplexed transport stream.
4. A method in accordance with claim 3, further comprising:
 - modifying a program map table of the multiplexed transport stream to point to the PID of the isochronous data stream carrying said on-screen display rather than a PID of a video component of said active isochronous MPEG data stream.
5. A method in accordance with claim 3, further comprising:
 - modifying a program map table of the multiplexed transport stream to identify the isochronous data stream carrying the on-screen display as a secondary video source, wherein

a video component of said active isochronous MPEG data stream comprises a primary video source.

6. A method in accordance with claim 1, wherein:

the isochronous MPEG data stream carrying said on-screen display and an active isochronous MPEG data stream are provided to said serial interface as separate transport streams to be passed to said sink device; and

audio/video control commands are provided to said serial interface to enable a selection between said active isochronous MPEG data stream and said isochronous MPEG data stream carrying said on-screen display.

7. A method in accordance with claim 1, further comprising:

multiplexing said isochronous MPEG data stream carrying said on-screen display with an active isochronous MPEG data stream to produce a multiplexed transport stream wherein said isochronous MPEG data stream carrying said on-screen display is substituted in place of an active video component of said active isochronous MPEG data stream;

wherein said isochronous MPEG data stream carrying said on-screen display is passed to said sink device in said transport stream.

8. A method in accordance with claim 7, further comprising:

maintaining a program identifier (PID) of said active video component as a PID of the isochronous MPEG data stream carrying said on-screen display.

9. A method in accordance with claim 1, further comprising:

receiving said isochronous MPEG data stream carrying said on-screen display at said sink device; and

decoding said isochronous MPEG data stream carrying said on-screen display to provide said on-screen display.

10. A method in accordance with claim 1, wherein:

said source device comprises a television terminal; and
said sink device comprises a high definition television.

11. A method in accordance with claim 1, wherein:

said on-screen display comprises one of an electronic programming guide, a diagnostic menu, a video-on-demand menu, an advertisement, a pop-up graphic, an alert, a notice, a web page, a stock ticker, or a sports ticker.

12. A method in accordance with claim 1, wherein:

said action comprises one of a user driven action or a software driven action.

13. A method in accordance with claim 1, further comprising:

detecting at said source device an action deactivating the on-screen display;
disabling said passing of said isochronous MPEG data stream carrying said on-screen display to said sink device; and
providing said active isochronous MPEG data stream to said sink device.

14. A source device capable of passing an on-screen display over a serial interface, comprising:

a tuner adapted for receiving an active isochronous MPEG data stream and graphic data for an on-screen display;
a serial interface adapted for communication with a sink device;
a processor adapted for detecting an action requiring an on-screen display at said sink device; and
an MPEG encoder adapted for encoding said graphic data as an isochronous MPEG data stream carrying said on-screen display to enable said isochronous MPEG data stream carrying said on-screen display to be passed to said sink device via said serial interface.

15. A source device in accordance with claim 14, wherein:

said serial interface comprises an IEEE-1394 interface.

16. A source device in accordance with claim 14, further comprising:

a multiplexer; wherein:

said encoder provides said isochronous MPEG data stream carrying said on-screen display with an associated program identifier (PID);

said multiplexer multiplexes the isochronous MPEG data stream carrying said on-screen display and said associated PID with an active isochronous MPEG data stream to provide a multiplexed transport stream; and

said isochronous data stream carrying said on-screen display is passed to said sink device in said multiplexed transport stream.

17. A source device in accordance with claim 16, wherein:

said processor modifies a program map table of the multiplexed transport stream to point to the PID of the isochronous data stream carrying the on-screen display rather than a PID of a video component of said active isochronous MPEG data stream.

18. A source device in accordance with claim 16, wherein:

said processor modifies a program map table of the multiplexed transport stream to identify the isochronous data stream carrying the on-screen display as a secondary video source, wherein a video component of said active isochronous MPEG data stream comprises a primary video source.

19. A source device in accordance with claim 14, wherein:

the isochronous MPEG data stream carrying said on-screen display and an active isochronous MPEG data stream are provided to said serial interface as separate transport streams;

audio/video control commands are provided to said serial interface to enable a selection between said active isochronous MPEG data stream and said isochronous MPEG data stream carrying said on-screen display.

20. A source device in accordance with claim 14, further comprising:

a multiplexer; wherein:

said isochronous MPEG data stream carrying said on-screen display is multiplexed with an active isochronous MPEG data stream to produce a multiplexed transport stream wherein said isochronous MPEG data stream carrying said on-screen display is substituted in place of an active video component of said active isochronous MPEG data stream;

wherein said isochronous MPEG data stream carrying said on-screen display is passed to said sink device in said transport stream.

21. A source device in accordance with claim 20, wherein:

a program identifier (PID) of said active video component is maintained as a PID of the isochronous MPEG data stream carrying said on-screen display.

22. A source device in accordance with claim 14, wherein;

said isochronous MPEG data stream carrying said on-screen display is received at said sink device via said serial interface; and

said isochronous MPEG data stream carrying said on-screen display is decoded at said sink device to provide said on-screen display.

23. A source device in accordance with claim 14, wherein:

said source device comprises a television terminal; and

said sink device comprises a high definition television.

24. A source device in accordance with claim 14, wherein:

said on-screen display comprises one of an electronic programming guide, a diagnostic menu, a video-on-demand menu, an advertisement, a pop-up graphic, an alert, a notice, a web page, a stock ticker, or a sports ticker.

25. A source device in accordance with claim 14, wherein:

said action comprises one of a user driven action or a software driven action.

26. A source device in accordance with claim 14, wherein:

said processor detects an action at the sink device deactivating the on-screen display;

said source device disables said passing of said isochronous MPEG data stream carrying said on-screen display to said sink device; and

said source device provides said active isochronous MPEG data stream to said sink device.